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| APPLICATION NO.              | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/806,853                   | 03/23/2004  | Neal Hall            | 204.001US01         | 2485             |
| 27073                        | 7590        | 03/07/2006           | EXAMINER            |                  |
| LEFFERT JAY & POLGLAZE, P.A. |             |                      | GORMAN, DARREN W    |                  |
| P.O. BOX 581009              |             |                      | ART UNIT            |                  |
| MINNEAPOLIS, MN 55458-1009   |             |                      | PAPER NUMBER        |                  |
|                              |             |                      | 3752                |                  |

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/806,853

Applicant(s)

HALL ET AL.

Examiner

Darren W. Gorman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 13-18 and 22-30 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11, 12 and 19-21 is/are allowed.
- 6) ☒ Claim(s) 1 and 4-10 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/23/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Invention Group I, and further Species Group I, in the reply filed on February 10, 2006 is acknowledged.

The traversal with respect to the restriction between the apparatus of claims 1-26 and the method of claims 27-30 is on the ground(s) that claims 27-30 all recite a fusible closure, and therefore the initial restriction requirement stating that the method of claims 27-30 can be performed by an apparatus that does not specifically include a fusible tip disposed at a distal end of a delivery tube is incorrect. This is not found persuasive because, as Applicant admits, the method of claims 27-30 does not specifically include a fusible tip disposed at a distal end of a delivery tube. In other words, an apparatus having a fusible closure that is not necessarily "a fusible tip disposed at a distal end of a delivery tube" can still perform the method steps recited.

The requirement is still deemed proper and is therefore made FINAL.

The traversal with respect to the species requirement between the apparatus shown in Figures 1-3 and the apparatus shown in Figure 4 is on the ground(s) that the apparatus shown in Figure 4 is "simply an extension of the apparatus to multiple appliances". This is not found persuasive because the structure of the apparatus shown in figure 4 is clearly patentably distinct from the structure of the apparatus shown in Figures 1-3, because the apparatus shown in Figure 4 includes a plurality of delivery tubes and a fusible tip located at a distal end of each of the delivery tubes, whereas the apparatus of Figures 1-3 includes only a single delivery tube. Moreover, since Applicant has not submitted evidence or identified such evidence now of record

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showing the identified species depicted in Figure 4 to be an obvious variant of the identified species shown in Figures 1-3, or clearly admitted on the record that this is the case, the requirement is still deemed proper and is therefore made FINAL.

2. Although Applicant has indicated that all of claims 1-26 read on the elected species, it is determined by the Examiner that only claims 1-12 and 19-21 read on the elected species, since each of claims 13-18 and 22-26 include recitations of a plurality of delivery tubes and a fusible tip located at a distal end of each of the delivery tubes, which are features exclusive to the non-elected species.

Claims 13-18 and 22-30 are therefore withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Invention/Species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on February 10, 2006.

#### ***Information Disclosure Statement***

3. The IDS filed on March 23, 2004 is hereby acknowledged and has been placed of record. Please find attached a signed and initialed copy of the PTO 1449.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Linsalato et al., USPN 3,907,037.

As to claim 1, Linsalato shows a fire extinguisher (see Figure 2) comprising: a container (20) containing a pressurized fire retardant (54); a delivery tube (30 or 32) connected to the container and in fluid communication with the pressurized fire retardant; and a fusible tip (38 or 40, each of which comprise fusible material 72) disposed at a distal end (74, 78) of the delivery tube that seals the delivery tube (see Figure 5), and which, upon melting of the fusible tip when the fusible tip is exposed to a temperature that exceeds its melting temperature, permits expulsion of the pressurized fire retardant from the container and through the distal end of the delivery tube (see column 3, lines 25-48).

As to the preamble, which recites an “appliance fire extinguisher”, it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951)

Further as to claim 1, the claim contains functional language in the recitation, “wherein the distal end is disposable within the appliance and wherein the fusible tip is adapted to release the fire retardant from the container into the appliance”. Since the aforementioned functional limitations do not further limit the claimed structure of the device, these limitations have been given patentable weight in as much as the prior art reference structure is capable of performing the claimed function.

As to claim 7, Linsalato shows a filling tube (50) disposed on the container, which is used for filling/charging the container (see Figure 4; and column 2, lines 48-60). Though the device of Linsalato is described as being “disposable”, there is nothing that would preclude the user from recharging the container via the filling tube after the device has been used at least once.

As to claim 9, the claim contains functional language in the recitation, “wherein the distal end is disposable within an air intake of the appliance”. Again, since the aforementioned functional limitations do not further limit the claimed structure of the device, these limitations have been given patentable weight in as much as the prior art reference structure is capable of performing the claimed function.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linsalato et al.

Regarding claim 8, Linsalato teaches all of the structural limitations of the apparatus as recited in claim 1, however Linsalato does not expressly disclose the fusible tip material as being “solder”.

It is old and well known in the art to use solder material as a reliable temperature sensitive trigger for actuating fire-extinguishing devices. It should be noted that Linsalato,

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though not expressly disclosing “solder” for use with the disclosed apparatus, notes in the “Description of the Prior Art” that “fusible solder” is known for use as a temperature sensitive trigger in fire extinguishers of the prior art (see column 1, line 12).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use “solder” as the fusible material in the fusible tip shown by Linsalato, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious choice. *In re Leshin*, 125 USPQ 416 (CCPA 1960)

Regarding claim 10, Linsalato teaches all of the structural limitations of the apparatus as recited in claim 1, however Linsalato does not expressly disclose using the apparatus with any of the particular appliances listed in claim 10, although these limitations are merely recitations of intended use of the apparatus. It should be noted that Linsalato does expressly teach the disclosed fire extinguisher being “particularly suitable for use in enclosed areas” (see column 1, lines 5-6).

Since a recitation of intended use of a claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art, and since the apparatus of Linsalato comprises all of the necessary structure of the claimed apparatus of claim 1, then the apparatus of Linsalato is capable of being used for extinguishing fires within any and all of the recited appliances of claim 10. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the apparatus shown by Linsalato, as a fire protection/fire extinguishing device for any and all of the appliances recited, since it has been held that a

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recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, USPQ2d 1647 (1987)

8. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linsalato et al., in view of Silverman, USPN 4,834,188.

Linsalato teaches all of the structural limitations of the apparatus as recited in claim 1, however Linsalato does not expressly disclose the device further comprising a pressure indicator connected to the container and in fluid communication with the fire retardant, nor does Linsalato disclose the fire retardant as powder.

Silverman shows a fire extinguishing apparatus including a container (30) containing pressurized fire retardant, the apparatus employing a temperature sensitive fusible trigger, which upon melting of the fusible trigger when the trigger is exposed to a temperature that exceeds its melting temperature, permits expulsion of the pressurized fire retardant from the container (see Figure 1; and column 2, lines 42-58). Silverman further shows a pressure gauge (no reference number) connected to the container (see Figure 1). It should be noted that pressure gauges/indicators connected to pressurized containers containing pressurized fire retardant are old and well known in the art, in order to permit a user to visually monitor the pressurized condition of the container. Still further, Silverman teaches the well known concept that fire extinguishing devices may dispense liquid or dry chemical (i.e. powder) depending on the intended use of the device (see column 3, lines 29-37). For instance, when used in connection



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with a stove hood, dry powder is the fire retardant of choice, since a potential fire would likely include grease.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a pressure indicator, as taught by Silverman, with the device shown by Linsalato, in order to permit a user to visually monitor the pressurized condition of the container.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a dry powder fire retardant, as taught by Silverman, with the device shown by Linsalato, in order for the device to be more effective in extinguishing particular fires where powder is more effective, such as grease fires.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Linsalato et al., in view of Mountford, USPN 4,805,701.

Linsalato teaches all of the structural limitations of the apparatus as recited in claim 1, however Linsalato does not expressly disclose the device further comprising an alarm adapted to generate an alarm as a result of the fire retardant being released from the container.

Mountford shows a fire extinguishing apparatus including a container (12) containing pressurized fire retardant (14), the apparatus employing a temperature sensitive fusible trigger (40), which upon melting of the fusible trigger when the trigger is exposed to a temperature that exceeds its melting temperature, permits expulsion of the pressurized fire retardant from the container (see Figures 2 and 3; and column 2, line 38 through column 3, line 18). Silverman further shows the apparatus comprising an alarm (64) "of conventional type", which generates an

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audible alarm signal as a result of the fire retardant being released from the container (see column 3, lines 27-33), in order to warn anyone nearby that a fire has occurred, simultaneously with the extinguishing event (see column 4, lines 52-58). It should be noted that Mountford expressly discloses that many different gas pressure operated alarm units can be used (see column 5, lines 64-68).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include an alarm that generates an audible signal, such as that taught by Mountford, as a result of fire retardant being released from the container shown by Linsalato, such that a fire can be extinguished and nearby people can be warned simultaneously that a fire has occurred.

*Allowable Subject Matter*

10. Claims 11, 12 and 19-21 are allowed.

11. The following is a statement of reasons for the indication of allowable subject matter:

The prior art, alone or in combination, did not show or teach a fire extinguisher including the combination of a fusible/solder tip at a distal end of a delivery tube, and a pressure-actuated switch connected to the container and in fluid communication with the pressurized fire retardant, wherein the pressure-actuated switch is connected to a power supply circuit of the appliance for shutting off power to the appliance when a pressure in the container drops below a predetermined value as a result of the fire retardant being released from the container, as set forth in claims 11 and 19

12. Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents to Poitras, Lagasse, Kirchner, Mikulec, Tabor, Jr., and Hoffman, are cited as of interest.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren W. Gorman whose telephone number is 571-272-4901.

The examiner can normally be reached on M-F 7:30-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 571-272-4919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Darren W Gorman  
Examiner  
Art Unit 3752

*DWG 3/3/06*  
DWG  
March 3, 2006

  
**David A. Scherbel**  
**Supervisory Patent Examiner**  
**Group 3700**